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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,405	01/16/2002	Yusuke Nishigaki	FUJH 19.342	1591
26304	7590	12/21/2004	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			BELLO, AGUSTIN	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/053,405

Applicant(s)

NISHIGAKI ET AL.

Examiner

Agustin Bello

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/21/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Graves (U.S. Patent No. 4,994,909).

Regarding claims 1 and 8-12, Graves teaches a passive optical network system having an optical line terminal (upstream or incorporating reference numeral 20 in Figure 1) for transmitting a plurality of types of distributed data using optical signals, a plurality of optical network terminations (reference numeral 30 in Figure 1) for receiving said distributed data using optical signals; and a light splitting device (reference numeral 20 in Figure 1) for distributing the distributed data transmitted from said optical line terminal to said plurality of optical network terminations by means of optical signals, wherein each of said plurality of optical network terminations comprises: a control information transmitting unit (reference numeral 312, 320, 322 in Figure 3) for transmitting a reception request for at least one of said plurality of types of distributed data to said optical line terminal, said reception request designating the type of said at least one distributed data; and a data selection unit (reference numeral 310 in Figure 3) for selecting distributed data for said reception request from one or more types of distributed data transmitted from said optical line terminal; and wherein said optical a distributed line terminal comprises a data transmitting unit (reference numeral 222, 224, 226 in Figure 2) for transmitting

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distributed data that is set to be transmitted among said plurality of types of distributed data to said plurality of optical network terminations; and a setting unit (reference numeral 224, 228, 220 in Figure 2) for receiving said reception request and setting said distributed data transmitting unit so that distributed data of the types designated by said reception request is transmitted.

Regarding claim 2, Graves teaches that said setting unit of said optical line terminal (reference numeral 224, 228, 220 in Figure 2) checks whether or not said distributed data transmitting unit has already been set to transmit distributed data of the types designated by said reception request, and sets said distributed data transmitting unit if said distributed data transmitting unit has not been so set (column 8 lines 36-56).

Regarding claim 7, Graves teaches said control information transmitting unit of said optical network termination notifies other optical network terminations of the type of distributed data whose reception is requested, transmits said reception request if said type of distributed data whose reception is requested is not present among the types of data transmitted from other optical network terminations, which is being received by said other optical network terminations and, if said notification is received from another optical network termination, transmits the type of distributed data being received by said optical network termination itself to said other optical network terminations (column 8 lines 22-35).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves.

Regarding claims 3 and 5, Graves differs from the claimed invention in that Graves fails to specifically teach transmitting a reception ending request to said optical terminal wherein reception is canceled if the data of the designated type has not been selected by an optical network termination other than the optical network termination that has transmitted the reception ending request. However, transmission of requests to end reception of a particular channel of data is well known in the art and suggested by the ability of Graves' system to change channels (column 8 lines 8-15) with only four channels allocated to each network terminal (e.g. "channels a to d" of column 8 line 30), hence requiring an ending of one channel to accommodate another channel. Furthermore, one skilled in the art would clearly have recognized that it would have been beneficial to end reception of a particular channel only in situation where the channel had not been selected by another optical network termination. One skilled in the art would have been motivated to do so in order to avoid interruption of service to another optical network termination that wishes to continue viewing said channel. Moreover, communication between optical network terminations is well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to allow requests for ending of reception from an optical network terminal, and to end reception of a particular channel only in situation where the channel had not been selected by another optical network termination.

Regarding claim 4, Graves differs from the claimed invention in that Graves fails to specifically teach that said setting unit of said optical line terminal notifies the respective optical network terminations of type selection data for indicating the type of the distributed data that has been selected by each of said plurality of optical network terminations; and said control

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information transmitting unit of said optical network termination transmits said reception request to said optical line terminal if the type of distributed data whose reception is requested is not included in said notification. However, Graves does teach maintaining a provisioning map, access records, access codes, and available channels for each subscriber (column 8 lines 1-7) as well as transmitting channel identification for each channel to each optical network terminal (column 5 lines 12-19). One skilled in the art would clearly have recognized that the exchange of channel identification to each optical network terminal as well as the maintenance of records for each subscriber suggests the ability to notify each optical network terminal of the type of data to be transmitted and would further allow an optical network terminal to respond to the notification via the disclosed upstream path and controller if the data requested is not included in the notification of channels to be transmitted. One skilled in the art would have been motivated to include this feature in the system of Graves in order to ensure that the requests of each optical network terminal were fulfilled and if they were not, allow the optical network terminal some form of recourse. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to allow the transmission by the optical line terminal of notification of the types of data to be transmitted and the transmission of a reception request by the optical network termination if the type of distributed data whose reception is requested is not included in said notification.

Regarding claim 6, Graves differs from the claimed invention in that Graves fails to specifically teach following a priority ranking. However, the use of priority rankings in optical communication networks and more particularly shared resource communication networks is well known in the art. One skilled in the art would have been motivated to include the use of priority

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ranking in the system of Graves in order to easily resolve contention issues. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include priority ranking in the system of Graves.

***Conclusion***

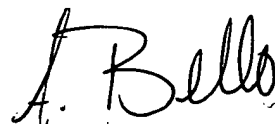
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chang, Szechenyi, Hata disclose relevant art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Agustin Bello  
Examiner  
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